Prescott Bluebird Recovery Project Newsletter - Fall 2005

An affiliate of the North American Bluebird Society

Two seven-year olds Re-captured

By Dave Flaming

Setting this nesting season's record for longevity is a male recaptured by bander Carol Munger at a box west of Scholls. He was banded as a nestling on June 1st, 1998 at a nest box monitored by Loren & Ellie Shipley. Carol recaptured him on June 3rd of this year making him a whopping seven years old at the time of recapture.

On June 29th bander Lauri Kunzman also trapped a male bluebird for the seventh year. He was banded as a nestling on July 23, 1998. His box is west of Wilsonville on Brian & Maia Agranoff's property, which is part of the route monitored by Gail Bolstad.

Gail has a six-year old female on her own property, too. The female was banded as a nestling on June 26th, 1999 and recaptured this year on June 8th.

Master Bander Achieves Research Breakthrough

Congratulations to our master bander and George Fox University Professor Don Powers and his team. Their amazing research in hummingbird flight dynamics disproves previously held beliefs that hummingbirds fly more like insects than birds. (Hint: it's neither.)

For the complete article please visit http://www.georgefox.edu/journalonline/flight.html.

On Parrett Mountain Prescott nest box monitors themselves are closely monitored.

Bluebird Route Monitors Needed

Due to retirement and relocation of a number of monitors, Prescott Bluebird Recovery Project is very much in need of monitors to oversee bluebird routes. The need is especially great on Chehalem Mountain. If you are a property owner or a resident of this area or even if you live elsewhere and just want to get to know more about bluebirds, contact a Prescott board member through the voicemail box at (503) 245 8449 or send us an email at email@prescottbluebird.com,

We also invite you to attend the Spring Bluebird Kickoff Monitor's Workshop at Champoeg State Heritage Area visitor center on February 18, 2006, from 9:00 AM to noon.

For more information on what it means to be a Western Bluebird nest box monitor, please visit our website at www.prescottbluebird.com. We look forward to meeting you in February and getting you started enjoying nature as you may never have before.

The Prescott Bluebird Recovery Project

is a non-profit 501C(3), all-volunteer organization dedicated to the recovery, restoration, and enhancement of the western bluebird in the northern Willamette Valley of Oregon.

Please send all tax-deductible donations to: PBRP, P.O. Box 1469, Sherwood, OR 97140. Our tax identification number is 93-1021520.

From the President's Nest Box

Prescott Bluebird Recovery Project closed its 2005 season with our Fall Wrap-up meeting held on September 17th at Champoeg State Heritage Area. At this annual meeting each of our monitors has the opportunity to share their stories and ideas from the 2005 breeding season.

A highlight of the meeting was hearing reports from Carole Hallett and Lynn Ahern on their trip to the North American Bluebird Society's annual convention held this past May in North Carolina. We are pleased and grateful that they were able to represent Prescott at the convention.

An important re-organization step took place at the meeting. At the recommendation of the Steering Committee, the membership voted to elect a Board of Directors to manage the day-to-day activities of Prescott Bluebird Recovery Project. The directors elected to serve a two-year term are Carole Hallett, Ron McDow, Lauri Kunzman, Jim Kreutzbender, and Nancy Fraser. Ex-offico members of the board are founding members Brenda McGowan and Pat Johnston, past president Dave Flaming, and master bander Donald Powers.

I wish to thank the many Prescott volunteers for the work they did in making this past season a success. Special thanks to our homeowners, who allow us access to their property to monitor the *Blues*.

- Dave Flaming

Emergency Box Building Successful in Colorado

Posted on PBRP's listserv
pbrpsc@yahoogroups.com
Date: June 9, 2005
From: Dave Flaming

Hello Everyone,
My Bluebird nestlings are hatching today! Why am I excited? Last month while visiting my daughter and her family in Colorado Springs I discovered a pair of Western Bluebirds. They were examining old woodpecker holes in the heavily wooded section of the property. I quickly enlisted the help of my two oldest grandsons and their Dad. Dad got online and downloaded the plans from Prescott's web site and the four of us built two nest boxes. Each week my 'monitors' have been reporting the progress from nest building to egg laying. Two weeks ago they reported that incubation had begun on five eggs and today they reported hatching. My seven grandchildren are very excited about their Blues and my son-in-law asked me when I would be banding the nestlings! ...

- Dave

(Pictured left to right: Grandsons Timothy and Mathew, Granddad Dave, and son-in-law, Tracy.)

New Board Member Experiences Migrant Bird Banding

By Nancy Fraser

This fall I had the opportunity to visit Long Point Bird Observatory, in Ontario, Canada. Long Point has active spring and fall migrant banding programs and is the oldest banding station in North America where over 60,000 birds of 270 species have been banded. Under the supervision of professional staff, volunteer banders from all over the world band birds each day from about six in the morning till noon. Migratory bird banding provides information on migration routes, breeding grounds, winter ranges, productivity, mortality, and other subjects of scientific interest.

Long Point is a small peninsula that extends from the north shore of Lake Erie and serves as a funnel for birds migrating south in the fall. The birds rest and feed in the modest woods, the yards and woodlots of the area. Mist nets are suspended in the woods, and birds are captured as they fly into the nets.

A bander and recorder sit in the banding building while volunteers check the nets every 15 minutes. They gently remove the birds from the nets and place them into individual fabric bags with drawstrings. When all of the nets have been visited or the volunteer runs out of bags, they return to the banding building, where the bags are hung on an "incoming" peg rack.

The bander takes each bag in order of first in, first out, removes the bird, names its species, and goes about making assessments and observations including sex, age, and amount of body fat. He calls out the information to the recorder, who logs it and the appropriate band number based on its size into the record. With 200 or more species, there are a lot of different band sizes to select. Determining age and sex may require measurement of the wing, flight, or tail feathers. A bird's body fat is measured by blowing on the breast feathers and observing the amount of yellow fat deposits under the skin. They then use a chart which designates the amount of fat on a numeric scale.

If the bird already has a band, they locate the record for the band and record it as a recapture. (One yellow warbler named Forrest was recaptured for eight consecutive years.) After the bander places the bird head first into the weighing vessel selected by the recorder, the recorder then places it on the scale, zeroes it, and records the weight. The weighing containers are heavy duty cardboard tubes with a cardboard "foot" placed at a right angle to cover one end of the tube (the birds' head end). Like the bands, the weighing tubes come in many sizes to accommodate the various bird species. Once the weight is recorded, the recorder upends the tube so that the bird is re-oriented feet down in a chute that allows it to see daylight and fly out and away. Astonishingly this entire process (assessing, banding, recording and releasing) happens in 20 seconds or less once the bird is in the bander's hands (though the sharp-shinned hawk they were handling when I arrived took a bit longer).

As I watched the count included three Swainson's thrushes, five Gray Cheeked Thrushes, seven Gray Catbirds, and the hawk. I also went out with them on a collection round and helped untangle five or six thrushes and catbirds from the nets and carried the bags to the banders. Not one bluebird! I guess we and our North American Bluebird Society colleagues banded them all!

Did you do a double-take? Not a bluebird, no. It's an Eastern screech owl (rufous female) in a homemade box . Photo courtesy of Nancy Fraser

Volunteers in the Spotlight

Chris Clere Passes the Torch

By Lauri Kunzman

Chris Clere has been a bluebird monitor since 1997, when he was first introduced to Western bluebirds. Since then he has been a dedicated and outstanding advocate for their recovery.

Chris fulfilled his childhood ambition to be a pilot, and although his flight schedule and in-service training with Skywest keep him in and out of Portland at a head-whirling pace, he always makes time for his bluebird route. This past year Chris further challenged his schedule by marrying fellow outdoor-lover, wife Cyndi, and together they presented the world with son Grant, a budding nature lover, rodeo rider, and bluebird fancier.

Cyndi and now Grant, too, regularly accompany Chris on his bluebird rounds. Grant is the "General" in this battalion, and Chris now calls himself "Private Dad" instead of Captain.

Above: *General* Grant goes along to check nest boxes with his *Private* Dad, Prescott monitor Chris Clere. Right: A birth announcement with a twist.

One particularly memorable moment on the trail was when Chris watched a Merlin capture a violet green swallow fledgling in midair on its first flight out of the nest box. A native Oregonian and rabid University of Oregon Ducks fan, Chris enjoys bicycling, hiking, ice hockey, basketball, photography, building model airplanes, and good music in his spare time (did I say *spare* time?). Thank you Chris and family for making time for Prescott in your busy lives!

With very thankful hearts, we announce the arrival of

Grant Ernest Clere

Mother and Son are both doing very well!

Vital Statistics:

EHD: July 16, 2005

AHD: July 22, 2005 at 11:38 AM via C-section

EFD: Sometime in 2023!

SUPPLEMENTAL FEEDINGS; Yes

DIMENSIONS: Length, 21 1/2 inches / Weight, 10 pounds 3 ounces.

Mom was born in a box in Northeast Portland. Dad was raised in a box in Raleigh Hills. Both parents are banded (and pretty tired, too). Grandma "Bluebird" has been sighted helping the parents. More details later. Chris and Cyndi

PRBP Records Show Successful 2005

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
Nesting Attempts	293	402	399	458	591	450	554	652	639
Failed Attempts	55	137	119	104	156	136	153	182	196
% Successful	81%	66%	70%	77%	74%	70%	72%	72%	69%
Earliest Hatch Date	4/22	4/23	4/23	4/19	4/23	4/21	4/25	4/15	4/23
Latest Hatch Date	8/12	8/23	8/16	8/30	8/15	8/16	8/16	8/13	8/17
Total Eggs	1451	1984	2004	2330	2992	2187	2806	3265	3206
Total Nestlings	1227	1491	1540	1850	2408	1625	2146	2502	2371
Nestlings Banded	939	1198	1295	1627	1952	1356	1837	2108	2006
Nestlings Fledged	1051	1059	1201	1468	1715	1233	1640	1878	1731
# Nestboxes	848	1114	1200	1544	1725	1780	1743	1683	1659
# Nestboxes Used	199	295	307	313	428	338	399	430	472
Utilization	23%	26%	26%	20%	25%	19%	23%	26%	28%
# Routes	31	39	60	82	83	80	78	77	80

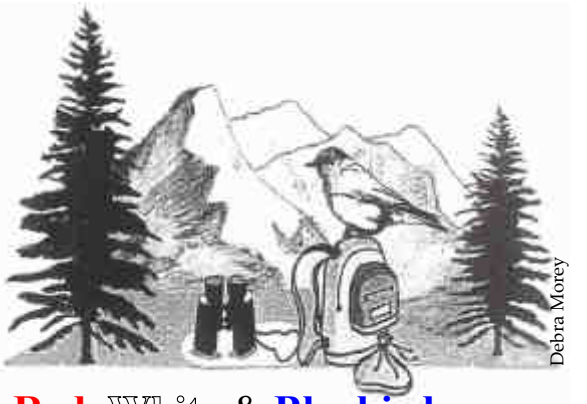
Orphaned Nestlings Find a Home

By Leslie Kempsell

On June 20th Ellie Shipley, a monitor on McCormick Hill Road, checked a box on her property expecting Bluebird eggs to have hatched. But when she looked in the box, it appeared that the eggs were gone. Reaching down into the nest material she found six cold newly hatched Bluebirds. The adults were gone, and a swallow had started a nest on top. So Ellie took them home, warmed them up and fed them. In a few days they were healthy and energetic. She called other Prescott volunteers to find recently hatched clutches that might take them in, but no luck. The only box she knew of was on her property where three had recently hatched. There was no way she could give them six more, but they could manage two. She needed somewhere for the other four.

When Ellie called me, it was really funny to hear her talk about taking care of the six on her own. "What have I done?, I can't take care of six Bluebirds for three weeks! How can I fledge them? I can't feed them out in the field!" I had no recently hatched Bluebird clutches, but as we talked I got an idea. One of my homeowners has two boxes of Bluebirds in his yard. We didn't discover the second pair until two eggs were laid. No eggs were ever added to the clutch, and we weren't sure when they had been laid. We had planned to remove them from the nest the next week (after two weeks) if there was no further activity. Most importantly, though the adults had no nestlings, it appeared to us that they were in feeding mode. They would take a meal worm and peek in the box first as if they expected the eggs to be hatched.

The homeowner agreed to let Ellie remove the eggs and put the four remaining orphans in the box. After they placed the nestlings, Ellie said the foster parents appeared flabbergasted, but they immediately set to work caring for them. Lynn Krupa banded them ten days later, and all six fledged successfully: two on McCormick Hill Road and four on Firdale Road.



Red, White & Bluebirds

NABS Convention
April 26-30, 2006, Antonio, Texas

A convention for bluebird lovers hosted by the Texas Bluebird Society.
Online registration is open at www.NABS2006.com.

One Pair Raises Seventeen

By Corinne Stefanick

At the Wyller home near Sherwood, I banded three bluebird clutches this season. The Wyller's feed meal worms in the spring and are successful each year with at least one clutch. This spring Mrs. Wyller called me early in April to report a female had built a nest and begun laying eggs. About three weeks later, I banded six nestlings and captured the adults, a first-year female and a second-year male. Mrs. Wyller later reported a successful fledging of all six new birds on May 8. On May 14 she made a note on her calendar that the female was incubating six eggs for a second clutch in the same box. The male was busy with the first clutch fledglings, while she prepared for the second batch.

The second clutch hatched June 4 and I banded five survivors on June 15. Mrs. Wyller's record shows this second clutch fledged by June 25. The female began rebuilding the nest immediately and laid six more eggs that hatched July 16. All fledged successfully in early August. That's a remarkable 18 eggs laid and 17 new bluebirds fledged by one hard-working bluebird pair. A special thank-you to the Wyller's for their devotion to the birds, keeping good records, and being a pleasure to work with.

Mate Guarding: Males Ensure They Raise Their Own

By Alice M. Z. Brylawski
Adapted from *Bluebird* – Winter 2005

Although the majority of bird species are socially monogamous, extrapair mating has been found in many species. Extrapair mating is the result of a triangle that contains a female, her social mate with whom she builds a nest, copulates, and cares for offspring, and one or more extrapair males with whom she only copulates.

Extrapair mating provides clear benefits for a male: by siring young that will be cared for by another male (the female's social mate), the extrapair male gains the benefit of having produced more offspring without having to put forth effort to care for them.

Potential benefits for the female are less direct, since copulating with an extrapair male provides her offspring with nothing but genes. However, if the extrapair male she copulates with is superior to her mate, then any offspring that are sired by that male may inherit the superior trait, which could enhance their survival or reproductive success. Thus the female improves her chances of having her genetic line continue.

Because females may mate with extrapair males, males have evolved mechanisms to protect their paternity. In birds the most common paternity guard is mate guarding, in which a male follows his mate closely throughout her fertile period to prevent or reduce opportunities for mating with extrapair males. While the social mate benefits from mate guarding, extrapair males benefit by circumventing those paternity guards. Additionally, the female may benefit from circumventing her mate's paternity guard, as she may gain indirect genetic benefits.

Our study examined the effectiveness of mate guarding in House Wrens by detaining males for a time during the female's fertile period, thus preventing them from guarding. By determining extrapair paternity in the broods of control and experimental males, we were able to examine how the behavior of the female and extrapair male intruders affected paternity. We determined paternity by extracting DNA from blood samples. Extrapair paternity was found in 47 percent of experimental broods and 11 percent of control broods with more extrapair nestlings in experiment broods (14 percent) than in control broods (2 percent). In addition, the longer the duration of extrapair male intrusion, the higher the proportion of extrapair young in a brood.

Male House Wrens that were prevented from guarding their mates had more extrapair young in their broods, and extrapair males only intruded successfully onto the territories of experimental males.

This suggests that mate guarding in House Wrens works. The driving mechanism in this contest is gene survival.

Fossils and DNA Tell Bluebird Age

Adapted from Bluebird, Summer 2004
Contributed by Pat Johnston

Fossil evidence is slim since small delicate creatures like bluebirds are less likely to leave such remains than larger animals like dinosaurs, but there is fossil evidence for two of the three bluebird species: Eastern and Western Bluebirds. Fossil remains attributed to Western Bluebirds dating to the Pleistocene period (10,000 to two million years ago) have been found in Carpenteria, California.

The first remains of the Eastern Bluebird were three leg bones discovered in an abandoned lime quarry in Florida among other remains of late-Pleistocene animals. A cave in Illinois contained Eastern Bluebird fossils dating from 8,000 to 10,000 years ago, and caves in Wyoming and Utah have yielded fossils from 10,000 to 25,000 years ago.

The best evidence of the age of these birds, however, comes not from ancient bones, but from the DNA of today's bluebirds. Scientists can track the history of a species and its relationship to other species by examining their mitochondrial DNA, which is present in large numbers in each cell of an organism.

This information was taken from monograph series published as The Birds of North America, supported by the American Ornithological Union, Cornell Lab of Ornithology, and the Academy of Natural Sciences. Monographs quoted were Mountain Bluebirds, series #222, Eastern Bluebird #381, and Western Bluebird #510. Patricia A. Gowaty, Judith A. Guinan and Elsie K. Eltzroth co-authored the monograph on Western Bluebirds.

Feeding nestlings: Which bird gets the food?

The young birds control their own destiny according to a recent study of Tree Swallows
From *Bluebird* - Winter 2005

The four eggs in the nest box have hatched, the naked baby birds seemingly intent on only one thing: food. Their beaks gape wide each time one of the parent birds arrives at the nest. All four babies are begging for food.

Do the parents know which young bird was fed most recently and which should get food now? If so, how is this determined? Food resources, parental energy, and time all are limited. What factors go into this important decision, or is it nothing but random chance?

Three ornithologists recently studied how Tree Swallows allocate food to their nestlings. For this bird species the young birds control their own destiny. They provide the cues to which the parent birds respond.

The question of how often and how much a young bird in a nest of several birds gets fed is more complex than you might imagine. In the bird world, all young birds need not be considered equal.

Parent birds can be expected to invest more of their time and energy in the young birds most likely to survive to adulthood and reproduce. The parent bird wants to ensure that its genes are passed along to succeeding generations.

Baby birds offer cues that help parent birds make the feeding decisions. The intensity of begging is one such cue. Position in the nest is another: In a nest box, young birds nearest the entrance are most likely to be fed. Nestling size is also a cue: The larger nestling can be considered most likely to survive, therefore the best investment for the parent.

A parent bird might also want to consider the sex of the young bird, if either sons or daughters are more likely to successfully reproduce as adults. And in bird species where females mate with more than one male, the resident male might want to favor his own offspring over those of an intruder.

Young birds, on the other hand, might be able to manipulate their parents by changing their begging intensity and thus gain more feeding attention from the adults. There is no guarantee to the parents, however, that the bird begging more intently is more likely to survive to adulthood. A small nestling might beg quite loudly but because of its size have less chance at survival.

The study we discuss here examined all of those possibilities. The study was conducted by Linda A. Whittingham and Peter O. Dunn of the University of Wisconsin at Milwaukee and Ethan D. Clotfelter of Amherst College in Massachusetts. The paper discussing this project was published in the journal *Animal Behaviour* in 2003.

Tree Swallow is a good Species for this study, the authors wrote, because 1) both parents feed the young, 2) the broods hatch asynchronously (over a period of time) creating size differences among brood members, 3) male nestlings are larger than female nestlings, 4) male parents are more likely to feed the larger nestlings, and 5) most broods have mixed paternity.

The study used Tree Swallows nesting in 85 nest boxes near Saukville, Wisconsin. It was conducted over two seasons, 1997 and 1998. Nest boxes were checked daily. Young birds were marked for identification. DNA analysis was done to determine parentage and sex of the baby birds. Video cameras were used to record nestling begging and parental feeding decisions.

"Overall, nestlings that begged first were more likely to be fed than were their nest mates," the authors wrote. "The first nestling to beg was fed on 65 percent of visits." In addition, the study found that male parents were more likely to feed the first nestling to beg than were female parents at the same nest.

A second factor was proximity to the nest box entrance. "Nestlings closer to the box entrance were more likely to be fed than were their nest mates," according to the study authors. In the most common brood size of five, the closest nestling to the entrance hold was fed on 44 percent of visits…" This is common behavior in cavity-nesting species, the authors said, because the position of

Continued on page 8

What good is a dead tree?

By Ray Boice, U.S. Forestry & Earthwatch
From *Bluebirds Across Nebraska* Winter 2004-2005

Standing dead trees called *snags* provide birds and mammals with shelter to raise young, and raptors with unobstructed vantage points. Woodpeckers and creepers feast on the wood-eating insects and provide "sawdust" for ants to process. Deer eat the lichen growing on the trunks.

Snags provide homes and fast food for wood-boring insects, ants and termites, which can help decompose the tree and release its nutrients. Even while rotting, a snag's roots help anchor soil and prevent erosion. Rich in humus, a fallen tree can serve as a nurse log for seedlings. Death is part of the forest cycle. In an undisturbed forest it may take a century for a 12-foot, 3-inch Ponderosa pine to decompose, but the whole forest benefits from the slow release of nutrients and by-products.

Snag Facts:

- Over 550 species of birds, 300 species of mammals, reptiles and nearly all fish benefit from snags for food, nesting or shelter.
- Only 30 bird species are capable of making their own nest cavities in trees. Another 80 animal species depend upon previously excavated or natural tree holes for their nests.
- The insulation of a tree trunk home allows many animal species to survive temperature extremes.
- Tree cavities and loose bark are used by many animals to store their food supplies.
- Insects living in dead wood eat thousands of forest pests which can harm living trees.
- Fish and amphibians hide under trees that have fallen into the water.

You make a difference

The forest neighborhood changes, yet the way animals, plants and people depend on each other remains the same. Even as a tree dies, it continues to help sustain life to animal families and eventually to new plants and trees, and the cycle begins again. Hundreds of thousands of snags would be saved in America each year, if people were careful when cutting dead wood.

Remember: There is life in dead trees.

Feeding Nestlings

Continued from page 7

the parent bird at its arrival at the nest is predictable. Nestlings thus can compete to be closest to the nest entrance.

Did the nestlings then compete with one another for best position in the nest when the parent appeared in the box entry? No, they did not. Instead, the study showed, "nestlings usually changed position within the nest cup upon ejection of a fecal sac at the end of a parental visit or during the absence of the parents between feeding visits. Those young birds that had not been fed most recently jockeyed for best position for the next food offering.

How about those cues not under nestling control, size and sex? Heavier nestlings were not found to be more likely to receive a greater proportion of feeds. Heavier nestlings were not found to beg first or be more aggressive in positioning themselves close to the nest box entrance.

Did paternity influence the feeding actions of the male? Again, the answer is no. While slightly over half of the young in this study were not fathered by the resident male at that particular nest, the male bird did not provide more food for his offspring.

Neither parent favored young birds by sex, according to the study.

"At most nests food was distributed equitably between members of the brood," said the study authors. At seven nests, however, distribution of food between nestlings was not uniform.

At six of these seven broods, at least one nestling died between nesting day 14 and fledging. In each case, the

Continued on page 9

Feeding Nestlings

Continued from page 8

dead nestling was the smallest in the brood and usually the one that had received the smallest number of total feedings during videotape observations. "Interestingly," said the authors, "the dead nestling was usually not the last to hatch."

In summary, Tree Swallow parents in this study were more likely to feed nestlings that begged first and were closer to the nest entrance when the parent returned with food, factors controlled by the young birds themselves. Feeding by parents did not appear to be influenced by nestling size, sex or paternity.

(Linda A. Whittingham and Peter O. Dunn, Department of Biological Sciences, PO Box 413, University of Wisconsin-Milwaukee, Milwaukee, WI 53201, email: whitting@uwm.edu.) Ethan D. Clotfelter, Biology Department, Amherst College, Amherst, MA 01022.

SPRING BLUEBIRD KICKOFF
MONITOR'S WORKSHOP

Saturday, February 18, 2006
9:00 AM – 12:00 NOON—New Monitors
1:00 PM – 3:00 PM—Returning Monitors and Banders
Champoeg State Heritage Area Visitors' Center

Come join the Prescott volunteer team, learn how to monitor a bluebird route, or learn what's new for the upcoming 2006 bluebird season. Please RSVP to (503) 245-8449 or www.prescottbluebird.com so that we can plan for refreshments and materials.

Directions to Champoeg State Heritage Area

Off I-5 take the Donald/Aurora exit No. 278. Follow the signs approximately six miles west to the park. There is a $3.00 charge per vehicle for parking.

Looking for the perfect Bluebird gift? The Champoeg State Heritage Area's visitor center gift shop is open daily from 11-4, and you'll find Prescott 's unique gift items on display.

Happy Holidays from PBRP!

Yes! I want to help the Prescott Bluebird Recovery Project!

Enclosed is my tax-deductible donation of

___ $10 ___ $25
___ $50 ___ $100 Other: _____

Mail to:
PBRP
PO Box 1469
Sherwood OR 97140

I cannot contribute right now, but I am interested in

☐ having a nest box placed on my property

☐ volunteer opportunities

☐ other: _____

Name: _____ Email: _____

Phone: _____ Best time to call: _____

We also thank our supporting businesses.

2005 Calendar

Spring Monitors' Workshop	February 18
Spring Newsletter Deadline	April 15
NABS Convention	April 26 - 30
Fall Wrap-up Meeting	September TBA
Fall Newsletter Deadline	October 1

Got blue-birds?

Crossing signs are available for $12.00 plus postage. Email or call PBRP and ask for Lauri Kunzman!

Prescott Bluebird Recovery Project
PO Box 1469
Sherwood OR 97140

Has your address changed? Please remember to let us know! Thank you.